

## REMARKS

### 1. *Status of claims*

All claims 1-24 are pending.

### 2. *Support for amendment*

The amendment of claims 9 and 24 finds support in the specification at p. 7, lines 10-11.

No new matter has been added.

### 3. *Claim rejections under 35 U.S.C. 102*

The Examiner rejected claims 1-5, 9-19, and 24 under 35 U.S.C. 102(b) as being anticipated by Urist, US 4,294,753 ("Urist"). Applicants respectfully traverse this rejection.

Urist teaches a method of obtaining osteogenic proteins involving demineralizing bone tissue by dialysis against an acidic medium (col. 2, line 67 to col. 3, line 12). The Examiner alleged that Urist teaches the isolation of osteogenic proteins from acidic medium present in the dialysis sacs.

Applicants disagree on the grounds that Urist does not teach every element of the present claims. Specifically, claims 1, 9, and 24, and all claims dependent thereon, comprise separating mineral-containing supernatant from demineralized bone tissue and extracting osteogenic proteins therefrom. Even the broadest possible reading of Urist does not teach this combination. Indeed, assuming *arguendo*, the supernatant and bone tissue phases can be considered "separated" by virtue of being supernatant/nonsupernatant in the dialysis bag, the supernatant (as well as the bone particles) from which Urist extracts proteins is "demineralized", not mineral-containing (col. 5, lines 15 – 16 and 25 – 35). Alternatively, assuming *arguendo*, Urist teaches a

“mineralized supernatant” (i.e., the HCl dialysis solution), instead of extracting proteins, he repeatedly discards excess volumes of the same (col. 5, lines 19 – 24).

In view of the foregoing, Applicants submit claims 1-5, 9-19, and 24 are not anticipated by Urist and respectfully request this rejection be withdrawn.

4. *Claim rejections under 35 U.S.C. 103*

The Examiner rejected claims 1-24 under 35 U.S.C. 103(a) as being unpatentable over Urist in view of Poser et al., US 5,371,191 ("Poser") and Urist, US 4,619,989 ("the '989 patent"). Applicants respectfully traverse this rejection.

The '989 patent teaches methods of extracting osteogenic proteins from mammalian bone tissue which expand on Urist by describing new process steps to be performed on the product of Urist (the '989 patent, col. 1, lines 62-65). Poser teaches extracting osteogenic proteins only from demineralized bone (see col. 3, lines 34-37, col. 4, line 66 – col. 5 line 22, col. 10, lines 5-9 and claims 22 and 30); and is silent about extracting osteogenic proteins from a supernatant, mineralized or not (see col. 9, line 64 – col. 10, line 3).

As such, neither the '989 patent nor Poser provide the skilled artisan with guidance to modify the teachings of Urist to arrive at the presently claimed invention, and Applicants respectfully request this rejection of claims 1-24 be withdrawn.

5. *Conclusion*

Applicants respectfully submit all pending claims 1-24 are in condition for allowance. The Examiner is invited to contact the undersigned patent agent at (713) 934-4065 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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